(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 20 January 2005 (20.01.2005)

(10) International Publication Number WO 2005/004845/A1

(51) International Patent Classification7:

A61K 9/14

(21) International Application Number:

PCT/EP2004/007666

(22) International Filing Date: 8 July 2004 (08.07.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0316341.7 60/505,415

11 July 2003 (11.07.2003) GB 23 September 2003 (23.09.2003)

- (71) Applicant (for all designated States except US): GLAXO GROUP LIMITED [GB/GB]; Glaxo Wellcome House, Berkeley Avenue, Greenford Middlesex UB6 0NN (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MONTEITH, Michael, John [GB/GB]; GlaxoSmithKline, Gunnels Wood Road. Stevenage Hertfordshire SG1 2NY (GB). THOMAS, Marian [GB/GB]; GlaxoSmithKline, Park Road, Ware Hertfordshire SG12 0DP (GB).
- (74) Agent: FLORENCE, Julia, Anne; GlaxoSmithKline, Corporate Intellectual Property (CN925.1), 980 Great West Road, Brentford Middlesex TW8 9GS (GB).

- Designated States tunless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN. CO, CR. CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES. FL GB. GD, GE, GH. GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC. LK, LR, LS, LT. LU. LV, MA. MD. MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, Z.W.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PHARMACEUTICAL FORMULATIONS COMPRISING MAGNESIUM STEARATE

(57) Abstract: The invention relates to the use of magnesium stearate to inhibit or reduce chemical interaction between an active ingredient substance and a carrier in a solid pharmaceutical formulation, wherein the active ingredient substance is susceptible to chemical interaction with the carrier. An inhalable solid pharmaceutical formulation comprising (a) an active ingredient substance artible to chemical interaction with lactose, (b) a carrier and (c) magnesium stearate is also provided together with uses thereof

